

ABSTRACT

THz waves 4 on two different wavelengths are
generated within a frequency range of about 0.5 to 3 THz, and
5 a subject matter 10 is irradiated with the THz waves on two
wavelengths to measure their transmittances, and thus the
presence of a target having wavelength dependence on the
absorption of the THz wave is detected from a difference of
their transmittances. Furthermore, a surface of the subject
10 matter is scanned two-dimensionally with each of the THz
waves on two different wavelengths, and an image of a
position where the transmittances of the two wavelengths
differ is displayed two-dimensionally.